

Title (en)

Buffy coat separator float system and method

Title (de)

Buffy-Coat-Separator-Schwimmersystem und -Verfahren

Title (fr)

Système et procédé à flotteur de séparation de couche leuco-plaquettaire

Publication

EP 2559991 A1 20130220 (EN)

Application

EP 12006372 A 20031002

Priority

- EP 03799392 A 20031002
- US 26397402 A 20021003

Abstract (en)

A tube and float system (100) for use in separation and axial expansion of the buffy coat includes a transparent or semi-transparent, flexible sample tube (130) and a rigid separator float (110) having a specific gravity intermediate that of red blood cells and plasma. The float (110) includes a main body portion (112) of reduced diameter to provide a clearance gap (150) between the inner wall of the sample tube (130) and the float (110). One or more protrusions (114) on the main body portion (112) serve to support the flexible tube (130). During centrifugation, the centrifugal force enlarges the diameter of the tube (130) to permit density-based axial movement of the float (110) in the tube (130). The float (110) further includes a pressure relief system (152) to alleviate pressure build up in the trapped red blood cell blood fraction below the float (110), thereby preventing red blood cells from being forced into the annular gap (150) containing the buffy coat layers.

IPC 8 full level

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CPC (source: EP US)

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Citation (applicant)

US 6197523 B1 20010306 - RIMM DAVID L [US], et al

Citation (search report)

- [X] US 5736033 A 19980407 - COLEMAN CHARLES M [US], et al
- [X] EP 1005910 A2 20000607 - BECTON DICKINSON CO [US]
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US 2004067162 A1 20040408; US 7220593 B2 20070522; AU 2003277223 A1 20040423; AU 2003277223 B2 20091105; AU 2003277223 B8 20091119; AU 2010200384 A1 20100225; AU 2010200384 B2 20120412; CA 2500884 A1 20040415; CA 2500884 C 20130709; EP 1552270 A2 20050713; EP 1552270 A4 20091230; EP 2559991 A1 20130220; JP 2006502388 A 20060119; JP 4387305 B2 20091216; US 2007092971 A1 20070426; US 2008131868 A1 20080605; US 2010074803 A1 20100325; US 2011165672 A1 20110707; US 2012164683 A1 20120628; US 7358095 B2 20080415; US 7629176 B2 20091208; US 7919049 B2 20110405; US 8114680 B2 20120214; US 8415169 B2 20130409; WO 2004030826 A2 20040415; WO 2004030826 A3 20041209

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